

IC-VL67

High Performance Socket478B Motherboard **User's Guide**

Edition 1.01

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NOTE

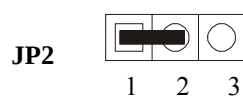
*** Celeron 1.7G/1.8G processor is not supported according to VRM10.**

*** Only 1.5V AGP Card is supported. If 3.3V AGP Card added, the motherboard will be damaged.**

*** You should have P4 power and connect its ATX 4-pin power connector with CN1.**

WARNING

To make the system work normally, please ensure JP2 of the mainboard is set as below. Refer to figure in section 2.2 for the location JP2.



If JP2 is shorted to 2-3, no CMOS data can be retained.

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The information presented in this publication has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies, whereas, specification is subjected to change without notice.

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Preface

IC-VL67 is a high-performance Intel Pentium 4 motherboard with ADD-7010 TV card and front panel. The system core logic is based on Intel 82865G Chipsets. It is integrated with TI TSB43AB23 1394a controller and Realtek RTL8100BL Ethernet controller.

Features

CPU:

- Support Socket 478 for Intel Pentium 4/ Celeron processor up to 3.0/3.06GHz and higher speed (*Celeron 1.7G/1.8G processor is not supported according to VRM10.*)
- 800MHz Intel NetBurst micro-architecture bus
- Hyper-Threading Technology supported

Core Logic:

- Intel 82865G + ICH5 chipsets

Main Memory:

- Dual channel DDR Configuration consist of two DDR DIMM sockets
- Support DDR400/333 DIMMs up to 2GB

VGA:

- Integrated Graphics controller in 865G GMCH
- Support 3D/2D enhancements
- 865G can access graphics data located in system memory at 2.7 GB/s (DDR333) or 3.2GB/s (DDR400)
- Support extend AGP8X slot

Audio:

- AC-Link with AC'97 2.3 compliant
- Software audio with Realtek ALC650 6-channel AC'97 codec, S/PDIF Output/Input supported

USB 2.0:

- Integrated USB 2.0 controller in ICH5
- Compliant with USB 2.0 specification
- Support Hi-speed, Full-speed and Low-speed data transfer rate. Max. Bandwidth 480Mbits/s
- One 2X5 USB 2.0 pin header

Ethernet:

- Realtek RTL8100BL 10/100Base-T Ethernet controller, LQFP package
- Full-Duplex supported, WFM 2.0 compliant

1394:

- TI TSB43AB23 1394a Host controller
- Compliant with IEEE 1394 OHCI Spec. Rev. 1.1
- Data transfer rate can be 100/200/400Mbps

LPC Super I/O:

- Winbond W83627HF LPC controller
- Build in FDC supports 1.2M/1.44M/2.88M FDD

ICH5 IDE:

- Integrated with Serial ATA Host controller, independent DMA operation on one ports, Data transfer rates up to 1.5GB/s
- Two enhanced PCI IDE channels which support up to 4 IDE devices with ATA-100 transfers up to 100MB/sec

Back Panel I/O Output:

- SPDIF-OUT optical connector
- 2 USB 2.0 connectors, 1 RJ-45 LAN port
- 2 1394 vertical connector
- PS/2 Keyboard and Mouse
- 1 fast serial ports, 1 D-type 15-pin VGA connector
- Line-in, MIC-in, Speaker-out

System BIOS:

- Award BIOS with 2MB/4MB EEPROM, ACPI/PnP supported

Expansion Slots:

- 1 PCI slot, 1 AGP8X slot

Form Factor:

- Self-defined @ 262 mm (L) × 180 mm (W), 6 Layers

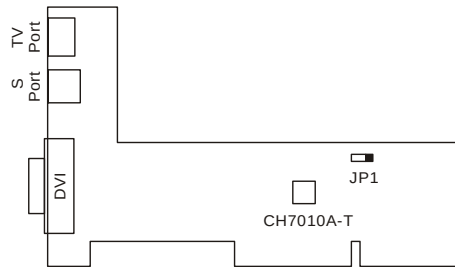
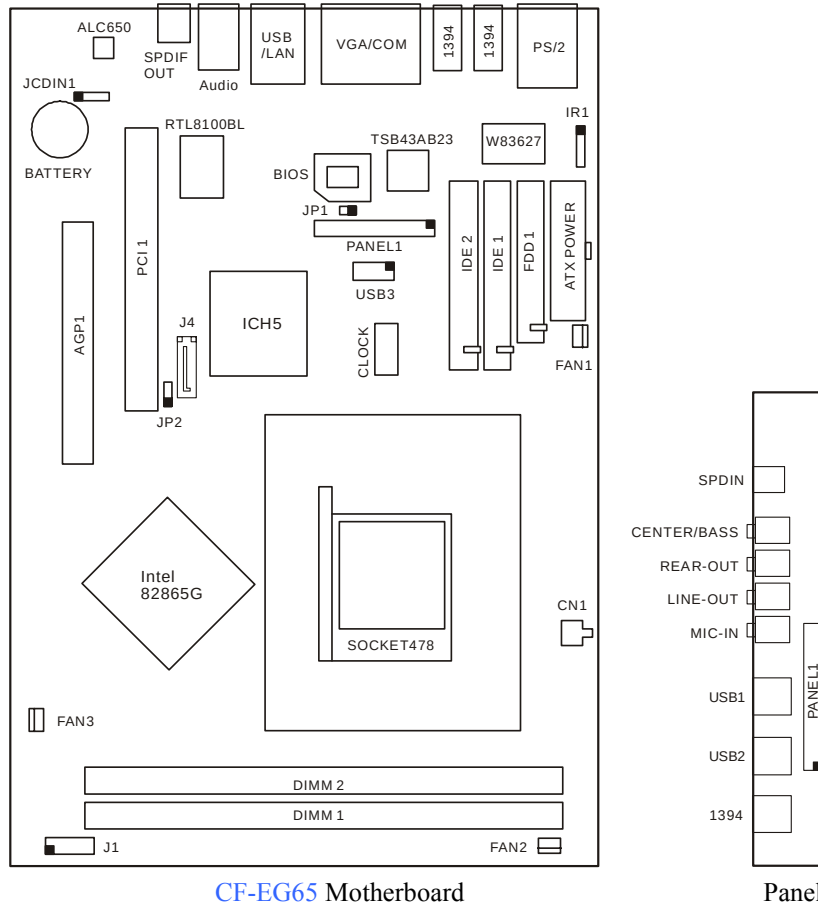
Front Panel I/O Output Board:

- Two USB connectors
- One 1394 connectors
- SPDIF-IN optical connector
- Center/Bass, Rear-out, Line-out, MIC-in
- Board size @ 27 mm (L) x 135 mm (W)

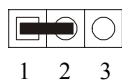
ADD Card (Optional accessory):

- Chrontel CH7010 DVI Transmitter + TV Encoder ADD card
- TV-out supporting up to 1024x768 graphics resolutions
- One S-out, one Composite and one DVI connector on the Bracket

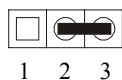
IC-VL67 Layout



ADD Card (ADD-7010)

2.1 Jumper Presentation

Pins 1 and 2 are shorted with a jumper cap.



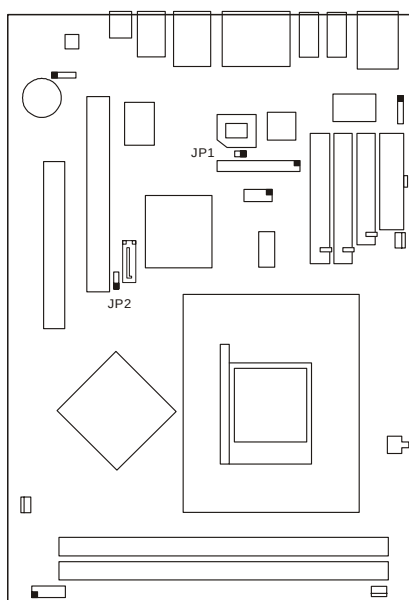
Pins 2 and 3 are shorted with a jumper cap.



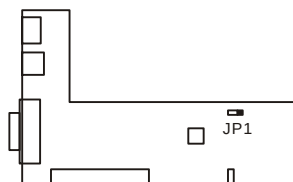
The jumper is shorted when the jumper cap is placed over the two pins of the jumper.



The jumper is opened when the jumper cap is removed from jumper.

2.2 Jumper Location

IC-VL67 Motherboard



ADD-7010

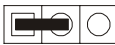
2.3 Jumper Settings

JP1 – BIOS Protection

JP1	BIOS protection
	Enabled
	Disabled

JP2 – Clear CMOS Data

JP2 is used to clear the CMOS Data in the RTC (build in ICH chip).

JP2	Clear CMOS data
	Normal
	Clear CMOS

JP1 (ADD-7010) – TV Mode Selection

JP1	TV mode
	NTSC mode
	PAL mode

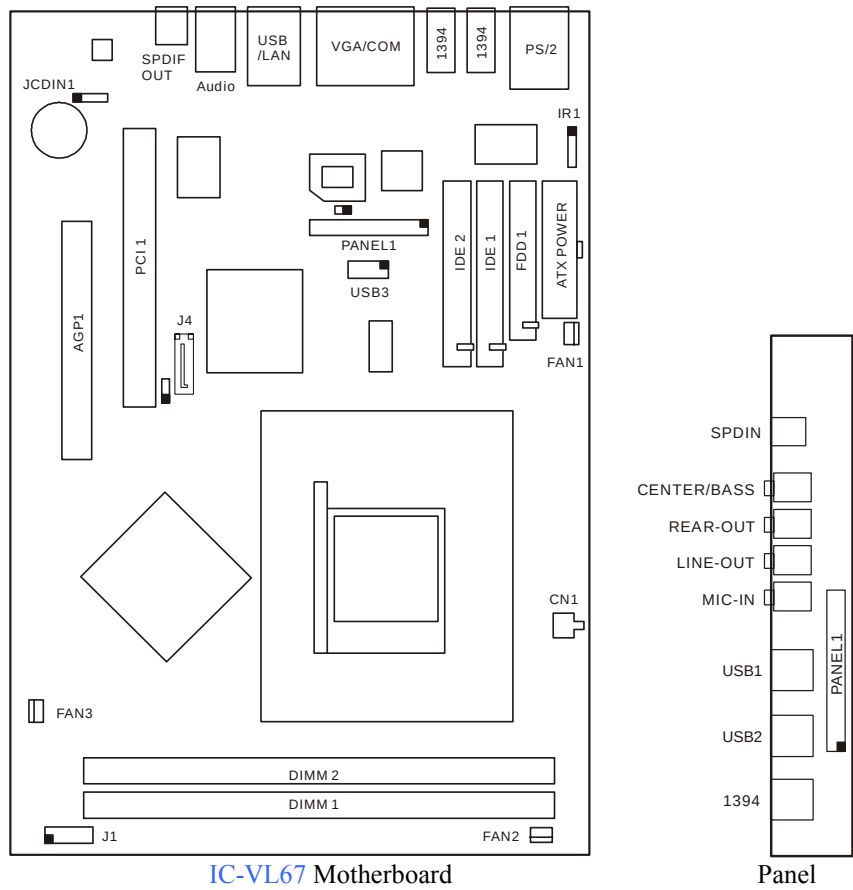
CHAPTER 3

CONNECTOR CONFIGURATION

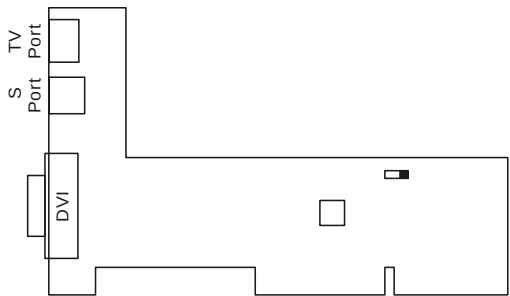
Once the mainboard has been fastened into system case, the next step is to connect the internal cables. The internal cables are wire leads with plastic female connectors that attach to the connectors. The mainboard connectors have the various numbers of pins and are the contact points between the mainboard and other parts of the computer.

Connector	Description
U1	Socket 478 of Intel Pentium 4 CPU
FAN1/2/3	Fan connector of CPU/system/North Bridge
IR1	IR connector
J1	2x6-pin front panel connector
PANEL1	2x15-pin multi-function connector
J4	Serial-ATA connector
J2	ATX power supply connector
JCDIN1	CD-ROM Audio-Input connector
USB3	2x5-pin USB connector
CN1	ATX 12V connector (It must be connected with the ATX 4-pin connector of P4 power, otherwise the system cannot boot up.)
DIMM1/2	DIMM slot
FDC1	Floppy disk connector
IDE1/2	IDE slot
PCI1	PCI slot
AGP1	AGP slot

Connector Location



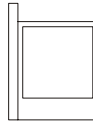
IC-VL67 Motherboard



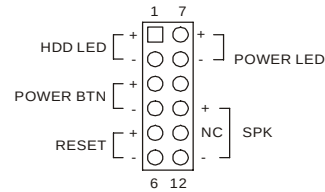
ADD-7010

3.1 U1 – Socket478

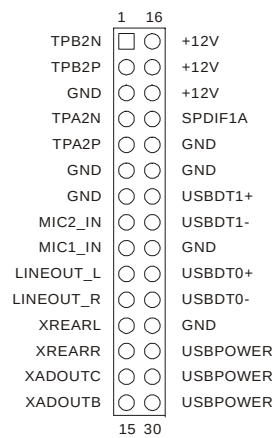
U1 is the Socket478 CPU socket that can support Intel Pentium 4 processor.



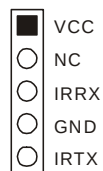
3.2 J1 - System Panel Connector



3.3 PANEL1 – Multi-Function Connector



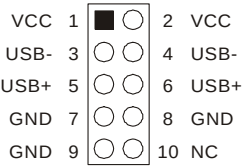
3.4 IR1 – IrDA Connector



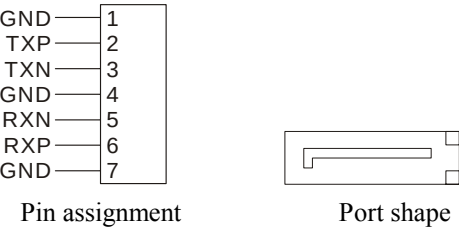
3.5 Fan Connector

FAN1 and FAN2 is the fan connector of system or CPU.

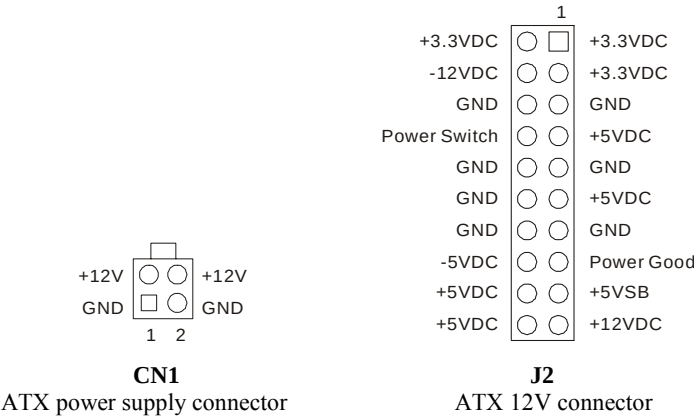
3.6 USB Connector



3.7 Serial-ATA Connector

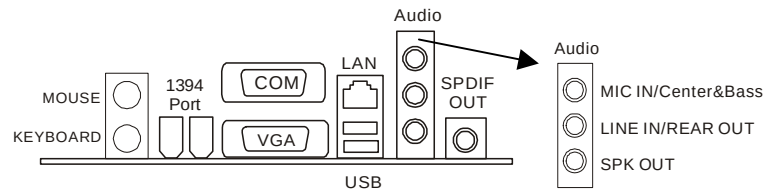


3.8 Power Supply Connector

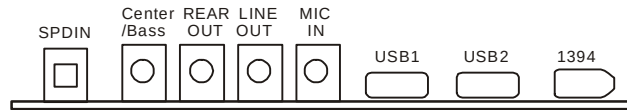


Note: CN1 must be connected with the ATX 4-pin connector of P4 Power.

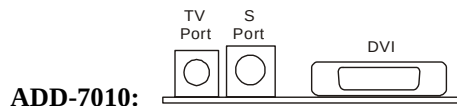
3.9 Rear Panel Connectors



3.10 Panel Connectors



3.11 ADD Card Connectors



DVI Connector pin assignment:

Pin #	Function	Pin #	Function	Pin #	Function
1	DATA2	13	DATA3		
2	DATA2	14	VCC5		
3	SHIELD24	15	GND5		
4	DATA4	16	HPDET		
5	DATA4	17	DATA0		
6	DDCCLK	18	DATA0		
7	DDCDATA	19	SHIELD05		
8	NC	20	DATA5		
9	DATA1	21	DATA5		
10	DATA1	22	SHIELDCLK		
11	SHIELD13	23	CLK		
12	DATA3	24	CLK		

CHAPTER 4

AWARD BIOS UTILITY

4.1 Entering Setup

Power on the computer, when the following message briefly appears at the bottom of the screen during the POST (Power On Self Test), press <Del> key or simultaneously press the <Ctrl> + <Alt> + <Esc> keys, to enter the AWARD BIOS CMOS Setup Utility.

Press <Del> to enter SETUP

Once you have entered, the Main Menu appears on the screen. The main menu allows you to select from eleven setup functions and two exit choices. Use the arrow keys to select the item and press the <Enter> key to accept or enter the sub-menu.

Phoenix – AwardBIOS CMOS Setup Utility	
► Standard CMOS Features	► Frequency/Voltage Control
► Advanced BIOS Features	Load Fail – Safe Defaults
► Advanced Chipset Features	Load Optimized Defaults
► Integrated Peripherals	Set Supervisor Password
► Power Management Setup	Set User Password
► PnP/PCI Configurations	Save & Exit Setup
► PC Health Status	Exit Without Saving
Esc: Quit F9: Menu in BIOS ↑↓→←: Select Item F10: Save & Exit Setup	
Load Optimized Defaults	

General help

In addition to the Item Specific Help window, the BIOS SETUP program also provides a General Help screen. You may launch this screen from any menu by simply pressing <F1>. The General Help screen lists the legend keys and their corresponding functions.

Scroll bar

When a scroll bar appears to the right of a help window, it indicates that there is more information to be displayed that will not fit in the window. Use <PgUp> and <PgDn> or the ↑ or ↓ keys to scroll through the entire help document. To exit the help window, press <Enter> or <Esc>.

4.2 Stand CMOS Features Setup

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item, and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

Phoenix – AwardBIOS CMOS Setup Utility		
Standard CMOS Features		
Date (mm:dd:yy)	Tue. Jun 17 2003	Item Help
Time (hh:mm:ss)	11:23:33	
▶ IDE Primary Master		Menu Level ▶ Change the day, month, year and century
▶ IDE Primary Slave		
▶ IDE Secondary Master		
▶ IDE Secondary Slave		
Drive A	[1.44M, 3.5 in.]	
Drive B	[None]	
Video	[EGA/VGA]	
Hal On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	63488K	
Total Memory	64512K	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail - Save Defaults F7: Optimized Defaults		

Date/Time

Set the system date and time.

IDE Primary/Secondary Master/Slave

Press <Enter> to enter the sub menu of detailed options.

Ordinarily, The BIOS will automatically detect the IDE drives type.

Drive A/B

Set the type of floppy drive installed in your system.

Options:

1.44M, 3.5 in. (default)

2.88M, 3.5 in.

None

360K, 5.25 in.
1.2M, 5.25 in.
720K, 3.5 in.

Video

Select the default video device.

Options:

EGA/ VGA: For EGA, VGA, SEGA, SVGA, or PGA monitors adapters.

CGA 40: Color Graphic Adapter, powering up in 40-column mode.

CGA 80: Color Graphic Adapter, powering up in 80-column mode.

MONO: Monochrome adapter, including high-resolution monochrome adapters.

Halt On

Select the situation in which you want the BIOS to stop the POST process and notify you.

Options:

All errors: Stop and prompt whenever the BIOS detect a non-fatal error.

No errors: The system boot will not stop for any error that may be detected.

All, But Keyboard (default): Stop and prompt for all other errors but a keyboard error.

All, But Diskette: Stop and prompt for all other errors but a diskette error.

All, But Disk/Key: Stop and prompt for all other errors but a keyboard or disk error.

Memory

Base Memory

Displays the amount of base (or conventional) memory detected during boot up.

Extended Memory

Displays the amount of extended memory detected during boot up.

Total Memory

Displays the total memory available in the system.

4.3 Advanced BIOS Features

This section allows you to configure your system for basic operation. You have the opportunity to select the system's default speed, boot-up sequence, keyboard operation, shadowing and security.

Phoenix – AwardBIOS CMOS Setup Utility Advanced BIOS Features		
Virus Warning	[Disabled]	Item Help
CPU L1 & L2 Cache	[Enabled]	Menu Level ▶ Allows you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep
Hyper-Threading technology	[Enabled]	
Quick Power On Self Test	[Enabled]	
First Boot Device	[Floppy]	
Second Boot Device	[HDD – 0]	
Third Boot Device	[LS120]	
Boot Other Device	[Enabled]	
Swap Floppy Drive	[Disabled]	
Boot Up Floppy Seek	[Enabled]	
Boot Up Numlock Status	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
* Typematic Rate (Chars/Sec)	6	
* Typematic Delay (Msec)	250	
Security Option	[Setup]	
APIC Mode	[Enabled]	
MPS Version Control For OS	[1.4]	
OS Select For DRAM > 64MB	[Non – OS2]	
Report No FDD For WIN 95	[No]	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail - Save Defaults F7: Optimized Defaults		

Virus warning

Allow you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.

Enabled: Activates automatically when the system boots up causing a warning message or appear when anything attempts to access the boot sector or hard disk partition table.

Disabled: No warning message will appear when anything attempts to access the boot sector or hard disk partition table.

CPU L1 & L2 Cache

Speed up memory access. However, it depends on CPU/Chipset design.

Options: Enabled (default), Disabled.

Hyper-Threading Technology

Whether enable the Hyper-Threading function if the P4 CPU supports HT. This item will be hidden if the CPU doesn't support HT.

Options: Enabled (default), Disabled

Quick Power On Self Test

This category speeds up Power On Self Test (POST) after you power up the computer.

If it is set to Enable, BIOS will shorten or skip some check items during POST.

Options: Disabled (default), Enabled

First/Second/Third Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items.

Options : Floppy, LS120, HDD-0, SCSI, CDROM, HDD 1-3, ZIP100, USB-FDD/ZIP/CDROM/HDD and LAN, or Disabled.

Boot Other Device:

Select the other Boot Device

Options: Enabled (default), Disabled

Swap Floppy Drive

If the system has two floppy drives, you can swap the logical drive name assignments.

Options: Disabled (default), Enabled

Boot Up Floppy Seek

Seeks disk drives during boot up. Disabling speeds boot up.

Options: Enabled (default), Disabled

Boot Up NumLock Status

Select power on state for NumLock.

Options: On (default), Off

Gate A20 Option

Options:

Fast (default): Select chipset controller to control GateA20.

Normal: Select keyboard controller to control GateA20. Default is Fast.

Typematic Rate Setting

Keystrokes repeat at a rate determined by the keyboard controller. When enabled, you can configure the following two items: typematic rate and typematic delay.

Options: Disabled (default), Enabled

Typematic Rate (chars/sec)

Set the rate that the keys are repeats per sec.

Options: 6-30 chars/sec

Typematic Delay (Msec)

Set the delay time before keystrokes begin to repeat.

Options: 250-1000 ms

Security Option

Select whether the password is required each time the system boots or only when enter setup.

System The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt.

Setup The system will boot, but access to Setup will be denied if the correct (default) password is not entered at the prompt.

Note: To disable security, select PASSWORD SETTING at Main Menu and then you will be asked to enter password. Do not type anything and just press <Enter>, it will disable security. Once the security is disabled, the system will boot and you can enter Setup freely.

OS Select For DRAM>64MB

Selects the operation system that is running with greater than 64MB of RAM on the system.

Options: Non-OS2 (Default), OS2

Report NO FDD for WIN 95

Whether report no FDD for Win95 or not.

Options: Yes, No.

Small Logo (EPA) Show

Enabled or disabled the EPA logo.

Disabled is Normal POST.

4.4 Advanced Chipset Features Setup

This section allows you to configure the system based on the specific features of the installed chipset. This chipset manages bus speeds and access to system memory resources, such as DRAM and the external cache. It also coordinates communications between the conventional ISA bus and PCI bus. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide the best operating conditions for your system. The only time you might consider making any changes would be if you discovered that data was being lost while using your system.

Phoenix – AwardBIOS CMOS Setup Utility		
Advanced Chipset Features		
DRAM Timing Selectable	[By SPD]	Item Help
CAS Latency Time	[2]	Menu Level ▶
Active to Precharge Delay	[8]	
DRAM RAS# to CAS# Delay	[4]	
DRAM RAS# Precharge	[4]	
Memory Frequency For	[Auto]	
System BIOS Cacheable	[Enabled]	
Video BIOS Cacheable	[Disabled]	
Memory Hole At 15M-16M	[Disabled]	
Delay Prior to Thermal	[16 Min]	
AGP Aperture Size (MB)	[128]	
Init Display First	[Onboard/AGP]	
3 ** On-Chip VGA Setting **		
On-Chip VGA	[Enabled]	
On-Chip Frame Buffer Size	[8MB]	
Boot Display	[Auto]	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail – Save Defaults F7: Optimized Defaults		

DRAM Timing Selectable

For setting DRAM Timing, BY SPD follows Intel PC SDRAM Serial Presence Detect Specification.

Options: Manual, By SPD (default)

CAS Latency Time

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing.

Options: 2, 2.5, 3.

Active to Precharge Delay

Options: 8, 7, 6, 5.

DRAM RAS# to CAS# Delay

This field let you insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. *Fast* gives faster performance; and *Slow* gives more stable performance. This field applies only when synchronous DRAM is installed in the system.

Options: 2, 3, 4

DRAM RAS# Precharge

If an insufficient number of cycles is allowed for the RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete and the DRAM may fail to retain data. *Fast* gives faster performance; and *Slow* gives more stable performance. This field applies only when synchronous DRAM is installed in the system.

Options: 2, 3, 4

Memory Frequency For

This item's options will auto change to 'Auto/DDR200/DDR266' if CPU FSB is 400MHz, and to 'Auto/DDR266/DDR333' if CPU FSB is 533MHz.

System BIOS Cacheable

Select Enabled allowed caching of the system BIOS ROM at F0000h-FFFFFh. Result in better system performance. However, if any program writes to this memory area, a system error may result.

Options: Enabled (default), Disabled.

Video BIOS Cacheable

Select Enabled allows caching of the video BIOS, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Options: Enabled, Disabled (default).

Memory Hole At 15M-16M

You can reserve this area of system memory for ISA adapter ROM. When this area is reserved, it cannot be cached. The user information of peripherals that need to use this area of system memory usually discusses their memory requirements.

Options: Enabled, Disabled (default).

Delay Prior to Thermal

Options: 4Min, 8Min, 16Min, 32Min.

AGP Aperture Size (MB)

Sets the effective size of the Graphics Aperture to be used in the particular GART Configuration.

Options: 4MB~ 256MB

On-Chip VGA:

Options: Enabled (default), Disabled

On-Chip Frame Buffer Size:

Options: 16MB, 8MB, 1MB

Boot Display:

Options: Auto, CRT, TV, EFP

4.5 Integrated Peripherals

Phoenix – AwardBIOS CMOS Setup Utility Integrated Peripherals		
On-Chip IDE Device	[Press Enter]	Item Help
Onboard Device	[Press Enter]	Menu Level ▶
SuperIO Device	[Press Enter]	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail - Save Defaults F7: Optimized Defaults		

OnChip IDE Device

Press Enter to enter submenu.

IDE HDD Block Mode

Block mode is also called block transfer, multiple commands, or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select *Enabled* for automatic detection of the optimal number of block read/writes per sector the drive can support.

Options: Enabled, Disabled.

On-Chip Primary/Secondary PCI IDE

The integrated peripheral controller contains an IDE interface with support for two IDE channels. Select *Enabled* to activate each channel separately.

Options: Enabled, Disabled.

IDE Primary/Secondary Master/Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

Options: Auto, Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

IDE Primary/Secondary Master/Slave UDMA

Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/33, select *Auto* to enable BIOS support.

Options: Auto, Disabled.

On-Chip Serial ATA Setting

On-Chip Serial ATA: Disabled, Enabled

Serial ATA Port0/1 Mode: Primary Master, Primary Slave, Secondary Master, Secondary Slave

Onboard Device

Press Enter to enter sbumenu.

USB/2.0 Controller

Select *Enabled* if your system contains a Universal Serial Bus (USB) controller and you have HUB peripherals.

USB Keyboard/Mouse Support

Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have a USB Keyboard/Mouse Device.

Options: Enabled, Disabled.

AC97 Audio

Allow you to decide to Auto/disable the chipset family to support AC97 Audio.

The function sets AC97/Audio Codec states. The system default is Auto.

Onboard 1394 Card

Options: Enabled, Disabled

Onboard LAN Card

Options: Enabled, Disabled

SuperIO Device

Press Enter to enter submenu.

Onboard FDC Controller

Select Enabled if your system has a floppy disk controller (FDC) installed on the system board and you wish to use it. If you install and-in FDC or the system has no floppy drive, select Disable in this field.

Options: Enabled, Disabled.

Onboard Serial Port 1/Port 2

Select an address and corresponding interrupt for the first and second serial ports.

Options: 3F8/IRQ4, 2E8/IRQ3, 3E8/IRQ4, 2F8/IRQ3, Disabled.

Auto: Onboard serial port address and IRQ are automatically assigned.

Disabled: Onboard serial port is disabled.

UART Mode Select

This field allows the users to configure what IR mode the 2nd serial port should use. The default is Normal.

Options: Normal, IrDA, ASKIR

RxD, TxD Active

This field configures the receive and transmit signals generated from the IR port. The default is Hi/Lo (when UART Mode Select is not set to Normal).

Options: Hi, Lo/Lo, Hi/Lo, Lo/ Hi, Hi/Hi

IR Transmission Delay

The default is Enabled (when UART Mode Select is not set to Normal).

Options: Enabled, Disabled.

UR2 Duplex Mode

This item allows you to select IR half/full duplex function.

Options: Half, Full.

Use IR Pins

This item allows you to select IR transmission routes, one is RxD2, TxD2 (COM Port) and the other is IR-Rx2Tx2.

Options: IR-Rx2Tx2, RxD2, TxD2

Onboard Parallel Port

This field allows the users to configure the LPT port. The default is 378H/IRQ7.

378H: Enable Onboard LPT port and address is 378H and IRQ7.

278H: Enable Onboard LPT port and address is 278H and IRQ5.

3BCH: Enable Onboard LPT port and address is 3BCH and IRQ7.

Disabled: Disable Onboard LPT port.

Parallel Port Mode

This field allows the user to select the parallel port mode.

The default is EPP+ECP.

Normal: Standard mode. IBM PC/AT Compatible bidirectional parallel port.

EPP: Enhanced Parallel Port mode.

ECP: Extended Capabilities Port mode.

EPP+ECP: ECP Mode & EPP Mode.

EPP Mode Select

This item allows you to determine the IR transfer mode of onboard I/O chip.

Options: EPP1.7, EPP1.9

ECP Mode Use DMA

This field allows the user to select DMA1 or DMA3 for the ECP mode.

The default is DMA3.

DMA1: This field selects the routing of DMA1 for ECP mode.

DMA3: This field selects the routing of DMA3 for ECP mode.

Game Port Address

Options: 201, 209, Disabled

Midi port address/IRQ:

Select midi port address/IRQ or disabled it.

4.6 Power Management Setup

The Power Management Setup allows you to configure your system to most effectively save energy while operating in a manner consistent with your own style of computer use.

Phoenix – AwardBIOS CMOS Setup Utility Power Management Setup		
ACPI Function	[Enabled]	Item Help
ACPI Suspend Type	[S1<POS>]	Menu Level ►
x Run VGABIOS if S3 Resume	Auto	
Power Management	[User Define]	
Video Off Method	[DPMS]	
Video Off In Suspend	[Yes]	
Suspend Type	[Stop Grant]	
MODEM Use IRQ	[3]	
Suspend Mode	[Disabled]	
HDD Power Down	[Disabled]	
Soft – Off by PWR-BTTN	[Instant – Off]	
CPU THRM-Throttling	[50.0%]	
Wake-Up by PCI card	[Enabled]	
Power On by Ring	[Enabled]	
x USB KB Wake-Up From S3	Disabled	
Resume by Alarm	[Disabled]	
x Date<of Month> Alarm	0	
x Time<hh:mm:ss> Alarm	0 : 0 :0	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail - Save Defaults F7: Optimized Defaults		

ACPI function

This item allows you to enable/disable the Advanced Configuration and Power Management (ACPI).

Options: Enabled (default), Disabled.

ACPI Suspend Type:

This item allows you to select S1(POS) or S3 (STR) function.

Options: S1 (POS), S3 (STR).

Power Management

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

1. HDD Power Down
2. Suspend Mode

User Define: Users can configure their own Power Management Timer.

Min Saving - defined timer values are used. All timers are in their MAX values.

Max Saving - defined timer values are used. All timers are in their MIN values.

Video Off Method

This determines the manner in which the monitor is blanked.

V/H SYNC+Blank: This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.

DPMS (default): Initial display power management signaling.

Blank Screen: This option only writes blanks to the video buffer.

Note: When the green monitor does not detect the V/H-SYNC signals, the electron gun will be turned off.

Video Off in Suspend:

This determines the manner in which the monitor is blanked.

Options: Yes (default), No

Suspend Type

Options: Stop Grant, PwrOn Suspend

MODEM Use IRQ

This determines the IRQ in which the MODEM can use.

Options: 3, 4, 5, 7, 9, 10, 11, NA

Suspend Mode

When enabled and after the set time of system inactivity, all devices except the CPU will be shut off.

Options:

Disabled (default)

1 Min ~ 1Hr: Defines the continuous idle time before the system enters Suspend mode. If any items defined in "PM Events" are on and activated, the system will be woken up.

HDD Power Down

Options:

Disabled (default): HDD's motor will not be off by timer.

1 - 15 Min: Defines the continuous HDD idle time before the HDD enters power saving mode (motor off).

Soft-Off by PWR-BTTN

Options:

Instant-Off (default): The system will immediately power off once the power button is pressed.

Delay 4 sec: The system will power off when power button is pressed for 4 seconds.

CPU THRM-Throttling

12.5%, ~ 87.5% Selects the duty cycle of the STPCLK# signal, and slowing down the CPU speed when the system enters green mode.

Wake-Up by PCI card

Enabled Allows the system to be waken up by PCI card.

Power On by Ring

Enabled Allows the system to be powered on when a indicator signal comes up to UART1 or UART2 from external modem (to LAN Wake-up Header from LAN adapter or to modem Ring on Header from internal modem card).

Resume by Alarm

Enabled RTC alarm can be used to generate a wake-up event to power up the system.

Disabled RTC has no alarm function.

Date/Time (of Month/hh:mm:ss) Alarm

Set the alarm date and time.

Reload Global Timer Events

Enabled reload global timer when following event occur.

Primary/Secondary IDE 0/1

FDD, COM. LPT Port

PCI PIRQ [A-D] #

4.7 PNP/PCI Configuration Setup

The following indicates the options for each item and describes their meaning.

Phoenix – AwardBIOS CMOS Setup Utility PnP/PCI Configuration		
Reset Configuration Data	[Disabled]	Item Help
Resources Controlled By	[Auto (ESCD)]	Menu Level ►
* IRQ Resource	Press Enter	
* DMA Resource	Press Enter	
PCI/VGA Palette Snoop	[Disabled]	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail - Save Defaults F7: Optimized Defaults		

Reset Configuration Data

Default setting is Disabled. Select Enabled to reset ESCD when you exit Setup, if you have installed a new add-on and the system reconfiguration has caused serious conflicts preventing the OS from booting.

Resources Controlled By

BIOS can automatically configure all boot and PnP compatible devices. If you choose Auto, you cannot select IRQ DMA and memory base address fields, because BIOS automatically assigns them.

If you choose Manual, go to the next item and press Enter to configure the IRQ Resources.

PCI/VGA Palette Snoop

Disabled is default setting. Enabled Non-standard VGA cards such as graphics accelerators or MPEG video cars may not show colors properly. Enabling this item can solve this problem.

4.8 PC Health Status

The following indicates the options for each item and describes their meaning.

Phoenix – AwardBIOS CMOS Setup Utility		
PC Health Status		
CPU Warning Temperature	[Disabled]	Item Help
System Temperature		Menu Level ▶
CPU Temperature		
FAN1 Speed		
FAN2 Speed		
VCORE		
+3.3V		
+5 V		
+12 V		
-12 V		
-5 V		
VBAT (V)		
5VSB (V)		
Shutdown Temperature	[Disabled]	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail - Save Defaults F7: Optimized Defaults		

CPU Warning Temperature

An alarm will beep when the CPU temperature is over this value. *Disabled* No alarm beep.

Shutdown Temperature

Set the shutdown temperature.

4.9 Frequency/Voltage Control

The following indicates the options for each item and describes their meaning.

Phoenix – AwardBIOS CMOS Setup Utility Frequency/Voltage Control		
CPU Clock Ratio	[8 X]	Item Help Menu Level ►
Auto Detect DIMM/PCI Clk	[Enabled]	
Spread Spectrum	[Disabled]	
CPU Host/PCI Clock	[Default]	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail - Save Defaults F7: Optimized Defaults		

CPU Clock Ratio

Selects the multiplication of processor core frequency. If a Ratio locked processor installed, this item will be hidden. This item is only for users who understand all the CPU parameters, i.e. system bus frequency, “66MHz” and multiplication of processor core frequency for system bus frequency. Selects the CPU speed according to your CPU brand and type. 8~50X.

Auto Detect PCI Clk

Enabled Close empty DIMM or PCI clock to reduce EMI. Disabled Does not close empty DIMM or PCI clock.

Warning: Be sure your selection is right. CPU over speed will be dangerous!

Spread spectrum

Disabled, Enabled

CPU Host/PCI Clock

Default

4.10 Load Defaults

Load Optimized Defaults

The Optimized Defaults are common and efficient. It is recommended to load the optimized defaults at first, and then modify the needed configuration settings. Select this item and press <Enter>, the following message will display, type in “Y” to load the default values, type “N” to cancel.

A screenshot of a BIOS message box with a red border. The text inside is "Load Optimized Defaults (Y/N)? N".

```
Load Optimized Defaults (Y/N)? N
```

Load Fail-Safe Defaults

The safest default settings. You can use this function to detect the errors. Select this item and press <Enter>, the following message will display, type in “Y” to load the default values, type “N” to cancel.

A screenshot of a BIOS message box with a red border. The text inside is "Load Fail-Safe Defaults (Y/N)? N".

```
Load Fail-Safe Defaults (Y/N)? N
```

4.11 Password Setting

When you select “USER PASSWORD” or “SUPERVISOR PASSWORD” and press <Enter>, the following message will appear at the center of the screen:

A screenshot of a BIOS message box with a red border. The text inside is "Enter Password: ***".

```
Enter Password: ***
```

Input the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection.

A screenshot of a BIOS message box with a red border. The text inside is "Confirm Password: ***".

```
Confirm Password: ***
```

To disable password, just press <Enter> when you are prompted to enter password. A message as below will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter BIOS Setup freely.

A screenshot of a BIOS message box with a red border. The text inside is "PASSWORD DISABLED !!! Press any key to continue...".

```
PASSWORD DISABLED !!!  
Press any key to continue...
```

If you have selected **“System”** in “Security Option” of “BIOS Features Setup” menu, you will be prompted for the password every time the system reboots or any time you try to enter BIOS Setup.

If you have selected **“Setup”** at “Security Option” from “BIOS Features Setup” menu, you will be prompted for the password only when you enter BIOS Setup.

Supervisor Password has higher priority than User Password. You can use Supervisor Password when booting the system or entering BIOS Setup to modify all settings. Also you can use User Password when booting the system or entering BIOS Setup but can not modify any setting if Supervisor Password is enabled.

4.12 Exit Setup

After you have finished the configuration of BIOS, save your settings and exit setup utility. Select “Save & Exit Setup” and press <Enter>, the following message will display, type “Y” and press <Enter> to confirm.



SAVE to CMOS and EXIT (Y/N)? Y

If you do not want to save the settings, select “Exit Without Saving” to exit setup utility without saving any change.



Quit Without Saving (Y/N)? N

The Drivers CD is an AutoRun CD. When you put it into the tray of CD-ROM drive, it will be executed automatically and the installation wizard will display after a while. If it cannot be executed automatically, please double click the “AUTORUN.EXE” in the root directory of CD-ROM.

Select “**IC-VL67** eCube P4 System” from the product list, and the drivers will list at the right field of the window.



Following drivers should be installed for this product:

- Intel INF Updated Utility
- Intel Application Accelerator
- Intel 865G Graphics Driver
- ALC 650 Audio Driver
- Intel ICH5 USB 2.0 Driver
- RTL8100B LAN Driver

Please select the proper driver according to your OS, and click “Go!” button to start the installation. Other utilities are optional only and depend on your requirements.

Other utilities are optional and depend on your requirements.